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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,208	10/29/2001	Hiroyuki Odaka	2530 US1P	4444

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EXAMINER	
COOK, REBECCA	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,208	ODAKA ET AL.	
	Examiner	Art Unit	
	Rebecca Cook	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-7,11,22-27 and 50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-7,11,22-27 and 50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1, 4-7, 11, 22-27 and 50 are pending and examined.

Claim Rejections - 35 USC § 112

Claim 50 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No support is seen in the specification for the recitation in claim 50 "wherein combination of said insulin sensitizer and said anorectic provides an increased lowering action of the concentration of glycosylated hemoglobin as compared to a single administration of said insulin sensitizer and said anorectic." Page 29, lines 27-31 recite that the composition provides excellent medicinal properties as compared with administration of an insulin sensitizer or an anorectic alone, for instance, a tendency to decrease the patient's body weight is observed. Page 30, lines 2-5 recite that the composition possesses an increased blood sugar lowering action as compared with administration of an insulin sensitizer or an anorectic alone.

Claims 1, 4-5, 11, 22-27 and 50 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for insulin sensitizers of formula I does not reasonably provide enablement for any and all insulin sensitizers and anorectants in combination.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate

in scope with these claims. It would take undue experimentation to determine which combination of insulin sensitizers and anorectants would yield the instant inventions. El-Din (abstract) discloses that the combination of tolbutamide and fenfluramine caused marked hyperglycemia in diabetic animals.

Applicants argue that the method of claim 1 is fully enabled, given the working example and teachings of the specification. This is not persuasive in view of the teaching of El-Din regarding the anorectant fenfluramine.

The Declaration of March 7, 2003 by Dr. Odaka submitted under 37 CFR 1.132 is persuasive for the combination of pioglitazone and structurally related insulin sensitizers and sibutramine to lower the concentration of glycosylated hemoglobin, treat diabetes and treat impaired glucose tolerance. Example 1 is persuasive for the combination of pioglitazone and structurally related insulin sensitizers and mazindol to lower the concentration of glycosylated hemoglobin, treat diabetes and treat impaired glucose tolerance.

Applicants argue that claim 1 is limited to the insulin sensitizers of formula (I). However, the method claims a combination of said insulin sensitizers and anorectants and it is this combination that is not enabled. For example, fenfluramine is a 5-HT agonist which is recited in claim 22. Amending claim 1 to recite "an anorectant selected from sibutramine and mazindol will overcome this rejection.

Claims 1, 4-6, 11-24, 26-27 and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "in combination with an anorectic" renders unclear if said anorectic is required to yield the methods of the independent claims, or if only the insulin sensitizer yields the desired method of lowering the concentration of glycosylated hemoglobin. Applicants argue that it is not unclear whether or not an anorectic is required. The question is whether an anorectic effective amount of the compound is required or whether the anorectic lowers the concentration of glycosylated hemoglobin and therefore an amount of anorectic effective to lower the concentration of glycosylated hemoglobin in required.

In claim 50 the intent of the recitation "wherein combination of said insulin sensitizer and said anorectic provides an increased lowering action of the concentration of glycosylated hemoglobin as compared to a single administration of said insulin sensitizer and said anorectic" is confusing. The combination product of insulin sensitizer and anorectic seems to be no different that the "single administration of said insulin sensitizer and said anorectic."

In view of the cancellation of claims 28-49 the earlier rejections under 35 USC 112, paragraphs one and two to said claims is moot.

Claim Rejections - 35 USC § 102 Withdrawn

In view of the cancellation of claims 28-49 the earlier rejection over WO 98/11884 is rendered moot.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-6, 11-24, 26-27 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/11884 and MEDLINE AN 97386874 (Russell et al) in view of BIOSIS AN 1997:356824.

Applicants cite Buchanan et al and argue that simply because an agent is an anti-diabetic compound does not mean that it will lower the concentration of glycosylated hemoglobin. This is not persuasive. Doctor's Guide, cited for evidentiary purposes only, discloses that the instant thiazolidinediones reduce glycosylated hemoglobin levels.

Claims 1, 4-6, 11-24, 26-27 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over MEDLINE AN 1998152487 and WO 93/03724 in view of BIOSIS AN 1997:356824.

Applicants cite Buchanan et al and argue that simply because an agent is an anti-diabetic compound does not mean that it will lower the concentration of glycosylated hemoglobin. This is not persuasive. Biosis AN 1997:356824 discloses that troglitazone, the insulin-sensitizing agent of MEDLINE AN 1998152487, reduces glycosylated hemoglobin. Therefore, it would be obvious to one of ordinary skill in the art to use an insulin-sensitizing agent to yield the recited method.

Applicants further argue that the anorectic of WO 93/03724 is completely different from the anorectic of the present invention. This is not persuasive. The instant

specification does not exclude the anorectic of WO 93/03724 from those that it intends to include in its method.

Applicants further argue that WO 93/03724 does not suggest a method for lowering the concentration of glycosylated hemoglobin. This is not persuasive. WO 93/03724 teaches that its anorectic is useful to treat or prevent obesity caused by the instant insulin sensitizing agent.

The instant method does not claim that the anorectic is used to reduce glycosylated hemoglobin levels or that the instant insulin sensitizer is synergistic when combined with an anorectic.

The Declaration of March 7, 2003 by Dr. Odaka submitted under 37 CFR 1.132 is persuasive for the combination of pioglitazone and structurally related insulin sensitizers and sibutramine to lower the concentration of glycosylated hemoglobin, treat diabetes and treat impaired glucose tolerance of claim 25.

On reconsideration, Example 1 in the instant specification is persuasive for the combination of pioglitazone and structurally related insulin sensitizers and mazindol to decrease blood sugar.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4-7, 11, 22-27 and 50 are again rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,329,403 (Odaka et al) for the reasons given in the Paper of March 11, 2005.

Applicants cite Buchanan et al and argue that not all anti-diabetic agents lower the concentration of glycosylated hemoglobin. This is not persuasive since the agents recited in Odaka et al (piogliatazone, troglitazone, rosiglitazone) are included in the insulin sensitizing compound of instant claim 1. Additinally, Doctor's Guide, cited for evidentiary purposes only, discloses that the instant thiazolidinediones reduce glycosylated hemoglobin levels.

The obviousness-type double patenting rejection over 6,329,404 (Ikeda et al) has been withdrawn.

Action Is Final

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cook whose telephone number is (571) 272-0571. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, can be reached on (571) 272-0951.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Renee Jones (571) 272-0547 in Customer Service.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The official fax number is 571-273-8300.

Rebecca Cook

Primary Examiner
Art Unit 1614

November 29, 2005